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THE DETERMINANTS OF PROFITABILITY OF COMMERCIAL BANKS IN NEPAL

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ABSTRACT

This study is to determine the factors that effects on profitability of Nepalese commercial banks. The study is based on secondary data of 11 banks with 77 observations for the period 2010/11 to 2016/17. The independent variables such as, credit deposit ratio, market share, liquidity, non-performing loans, GDP and inflation and dependent variable return on assets taken for the study. The market share price, liquidity and GDP has explained the profitability in Nepalese sample commercial banks cases.

KEYWORDS: Credit to Deposit Ratio, Market Share, Liquidity, Non-Performing Loans, GDP & Inflation

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INTRODUCTION

The banking sector has effective role plays to economic development of all the countries. Nepal is not far from this condition. The economic activities are directly or indirectly channeled through these commercial banks (Pradhan, 2016). In general, The ROA measurement is the best to determine the profitability. The assessment of ROA for how much return of commercial banks on total assets and have transforming effectively and efficiently to generate profit (Obamuyi, 2013).

The finding of this study has emphasized that the commercial banks profitability in Nepal is mainly influenced by market share price, liquidity and GDP on profitability in Nepalese sample commercial banks cases.

The main purpose to determinants the profitability of Nepalese commercial banks. The paper is further organized as follows: Section two describes literature review, three research methodology, for data presentation and analysis and final section draws summary and conclusions.

REVIEW OF LITERATURE

Guru et al. (1999) have examined profitability of Malaysian 17 commercial bank from 1986 to 1995. They have taken micro variable such as liquidity, capital adequacy and management expenses and macro variables ownership, firm size and national economy variables to measure the profitability. The study has found that management expenses and inflation are significant effects on profitability in Malaysian commercial banking sectors.

The study of Haron (2004) has examined the factors that have effects on profitability of Islamic Banks. The results of study revealed that the variables liquidity, capital structure, and money supply have a positive impact while asset structure and market share have negative effects on profitability.

Badola and Verma (2006) have asserted that the profitability of public sector banks in India. The study has covered the period of 1991 to 2004. The study has found that there isa high degree of relation between profitability and its predictors.

Kosmidou (2008) has analyzed the performance of twenty-three Greece Banks from 1990 to 2002. The study revealed that the correlation between ROAA and capital high capital and lower cost to income ratio, size and the growth of GDP are positive. The regression result reflected that inflation had a significant negative effect on performance.

In the context of Bangladesh, Sufian and Habibullah (2009) have explored the profitability of 37 Bangladeshi commercial banks from 1997 to 2004. The result revealed that loans intensity, credit risk and cost had major determinants of profitability. The effects of size had positive and significant on profitability (ROA and NIM) but negative and significant role had found with ROE. The external variables had not effects on profitability.

The study was carried out by Rao and Luke (2012) have carried out the profitability of the Ethiopian commercial banking sector for unbalance panel secondary data from 1999 to 2009. The internal and external factors to the banks had taken to examine the profitability of Ethiopian commercial banks. The internal factors like capital structure, liquidity, credit risk, loan portfolio, asset quality, and expense management that had effects on profitability. There was no role of external factors in the Ethiopian commercial banks cases.

Thota (2013) has studied about profitability of 108 Indian commercial bank. The study has taken take secondary unbalance panel data from 1999 to 2011. Among the bank specific and macroeconomic variable credit risk - bank specific variable that had an effect on ROA and ROE. The mixed results have found in term of other variables for private and foreign banks.

Islam, Sarker, Rahman, Sultana and Prodhan (2017) have analyzed that Bangladeshi eleven private commercial bank profitability for period of 2014 and 2015. Among the study variable non-performing loan has most explained, but the size has not effect on profitability.

Yao, Haris and Tariq (2018) have analyzed the profitability of Pakistan. The study was taken twenty-eight commercial banks as a sample for the period of 2007 to 2016. The most of bank specific and industry specific variables had explained the profitability in the positively but macroeconomic variable had negative but significant role to determine the profitability.

Likewise, the study of Bogale (2019) has examined the profitability by using the survey method of 14 Ethiopian commercial banks for the period of 2008 to 2017. The fixed effect The fixed effect regression results revealed that among bank specific variables capital adequacy and bank size have significant positive effect on profitability. Similarly, macroeconomic variable foreign exchange rate and lending interest rate were found to have a significant but negative effect on profitability.

RESEARCH METHODOLOGY

The secondary data of eleven commercial banks from 2011 to 2017 with 77 observations has been taken from respective commercial websites and economic survey published by the ministry of finance, Nepal. The cause comparative research design has been employed to determine the profitability. The study has taken return on assets (ROA) dependent variable and credit to deposit ratio (CD), market share (MS), Liquidity (CRR), non-performing loan (NPL) were taken

bank specific and gross domestic products (GDP) and inflation (INF) macroeconomic factors has been take as independent variables. The sample commercial banks, study period and no of observations have been presented in Table 1.

Table 1

S. No	Name of Banks	Year	No of Observation
1	Citizens Bank International Ltd.	2010/ 2011 - 2016/2017	7
2	Everest Bank Ltd.	2010/ 2011 - 2016/2017	7
3	Global IME Bank Ltd.	2010/ 2011 - 2016/2017	7
4	Laxmi Bank Ltd.	2010/ 2011 - 2016/2017	7
5	Nabil Bank Ltd.	2010/ 2011 - 2016/2017	7
6	Nepal Investment Bank Ltd.	2010/ 2011 - 2016/2017	7
7	NMB Bank Ltd.	2010/ 2011 - 2016/2017	7
8	Sanima Bank Ltd.	2010/ 2011 - 2016/2017	7
9	Siddhartha Bank Ltd.	2010/ 2011 - 2016/2017	7
10	Sunrise Bank Ltd.	2010/ 2011 - 2016/2017	7
11	Standard Chartered Bank Nepal Ltd.	2010/ 2011 - 2016/2017	7
Total Observations			77

THE MODEL

The study examines the relationship between profitability (ROA) dependent variable and independent variables such as CD, MS, CRR, NPL, GDP and INF by estimating ordinary least square (OLS) model. The regression model has been presented as under:

$$ROA_{it} = \beta_0 + \beta_1 CD_{it} + \beta_2 MS_{it} + \beta_3 CRR_{it} + \beta_4 NPLi_t + \beta_5 GDP_t + \beta_6 INF_t + e_{it}$$

Where, ROA = Return on Assets, CD = Total Loan to Total Deposit, MS = Market Share Price, CRR = Liquidity or Cash Reserve Ratio, NPL = Non-performing Loan Ratio, GDP = Real Gross Domestic Products, and INF = Inflation Rate, e_{it}= error Term.

DATA PRESENTATION AND ANALYSIS

Descriptive Statistics

The descriptive statistics for the study variables presented in Table 2. The ROA has mean value 1.72 percent with minimum and maximum vale 0.28 to 3.25 percent respectively. The CD ratio of selected banks ranges from a minimum of 48.92 to 101.25 with an average of 78.60 percent and standard deviation of 9.73. The market shares a minimum value of Rs. 145 to a maximum of Rs. 3600 with a mean of Rs. 894.58. The average liquidity ratio is 17.30 percent with the range minimum 4.90 percent to maximum 35.14 percent. The non-performing loan ratio minimum 0.00 percent to maximum 4.94 percent reported. The average non-performing loan ratio is 1.42 percent.

The GDP varies from a minimum of 0.01 to a maximum of 6.94 leading to the average of 3.90. The inflation ranges from a minimum of 4.50 to 9.90with an average of 8.32 and standard deviation of 1.82.

Table 2: Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Return on Assets (ROA)	77	.28	3.25	1.7162	.57416
Credit to Deposit (CD) Ratio	77	48.92	101.25	78.5969	9.73183
Market Share (MS)	77	145	3600	894.58	792.842
LIQ ratio(CRR)	77	4.90	35.14	17.3030	9.08968

Table 2: Contd.,

Non-Performing Loan (NPL)	77	.00	4.94	1.4121	1.02250
Gross Domestic Product (GDP)	77	.01	6.94	3.8986	1.98878
Inflation (INF)	77	4.50	9.90	8.3429	1.82205

Source: Annual Report of Sample Banks and Results are drawn from SPSS-20.

Correlation Analysis

The Pearson's correlation coefficients results have been presented in Table 3. The correlation coefficient between dependent and independent variables is less than 0.70 which shows that there is absent of multi collinerity between independent variables. The ROA is negatively related to CD, CRR, and NPL but positively related to MS, GDP and INF.

Table 3: Computation of Pearson's Coefficients of Correlations of ROA

Variables	ROA	CD	MS	CRR	NPL	GDP	INF
ROA	1						
CD	-.469**	1					
MS	.619**	-.678**	1				
CRR	-.395**	.063	-.217	1			
NPL	-.292**	.172	-.314**	.212	1		
GDP	.015	.039	-.195	.105	.087	1	
INF	.001	-.043	.067	-.020	.124	-.646**	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Source: Annual report of sample banks and results are drawn from SPSS - 20.

Regression Analysis

The result of ordinary least square regression of predictors are shows in the Table 4. The beta coefficient is negative and insignificant results found between return on assets and Credit to deposit ratio and non-performing loan ratio. It shows that these two variables have negative and insignificant effect on return on assets. But in the real practice it has major role in the banking industries. The findings of the result would not be real world.

Table 4: Regression Results for Independent Variables (CD, MS, CRR, NPL, GDP and INF) on Dependent Variables Return on Assets (ROA)

Predictors	Coefficients	Std. Error	T	Sig.	Collinearity Statistics	
					Tolerance	VIF
Constant	1.698	.777	2.187	.032		
CD	-.006	.007	-.885	.379	.520	1.923
MS	.000	.000	3.955	.000	.460	2.173
CRR	-.018	.006	-3.197	.002	.917	1.091
NPL	-.053	.052	-1.012	.315	.837	1.195
GDP	.066	.034	1.958	.054	.530	1.888
INF	.037	.036	1.017	.313	.545	1.835
No of Observations: 77, R Square:0.497, Adjusted R Square: 0.454, F value:11.536, Probability: 0.000, DW : 1.007						

Source: Annual Report of Sample Commercial Banks and Results are drawn from SPSS-20.

The coefficient of market share prices has significant and positive with return on assets. The result reveals that one of the significant factor for profitability is market share price. The gross domestic product has positive and significant result found. The result shows that Nepalese commercial banks profitability depended on gross domestic product. It is the indication of economic growth. One can expect its positive relationship with the profitability of a bank, which is consistent with previous studies of Sinha and Sharma (2016); Athanasoglou et al. (2008); Dietrich and Wanzenried (2011);

Trujillo-Ponce (2013). Therefore, the study also expects a positive impact of economic growth over profitability. The liquidity (CRR) has negative but significant impact on profitability. If the liquidity increase profitability decreases and vice versa. The result consistent with the study of Bourke (1989) and Molyneux and Thorton (1992). The inflation rate has positive but insignificant effect on profitability. The result consistent with study of Lee et al. (2015).

SUMMARY AND CONCLUSIONS

Profitability plays vital role of any corporation as well as national economy of every country. In Nepal commercial banks have major contributed to economic growth. In global scenario, banking and other financial sectors organization have been collapsed due the profitability caused. The banking sector has uncertain and unsecure day by days. So that the issues of the profitability of commercial banks have been carried out important in Nepal and worldwide. The study examines bank specific variables (CD, MS, CRR and NPL) and macroeconomic variables (GDP and INF) that effects on profitability of Nepalese commercial baking cases. The secondary data of eleven sample commercial bank with seventy-seven observations for the period of 2011 to 2017 has been take for the study. Hence the study concluded that market share, liquidity and gross domestic products are the major determinants factors of profitability of Nepalese commercial banks. So that the banker should be careful about these factors to increase the profitability. The regulators also focus to monitors in this regards.

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